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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

--- In the Matter of ---	)	
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PUBLIC UTILITIES COMMISSION	)	DOCKET NO. 03-0371
	)	
Instituting a Proceeding to Investigate Distributed Generation in Hawaii	)	
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PRELIMINARY STATEMENT OF POSITION AND CERTIFICATE OF SERVICE OF JOHNSON CONTROLS, INC.

Thomas C. Gorak
Gorak & Bay, L.L.C.
76-6326 Kaheiau Street
Kailua-Kona, HI 96740-3218
808-331-2027
GorakandBay@hawaii.rr.com

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Pursuant to Prehearing Order No. 20922 ("Prehearing Order"), issued on April 23, 2004, by the Public Utilities Commission of the State of Hawaii ("PUC" or "Commission"), Johnson Controls, Inc. ("JCI"), a Party to this docket, hereby files its preliminary statement of position ("Preliminary Position Statement") and certificate of service in the above-captioned docket.[1] In addition, this pleading responds to the Commission's directive in the Prehearing Order that the Parties and Participants "briefly explain in their Preliminary Statements of Position why these issues are pertinent and need to be addressed by the Commission in this proceeding." Order No. 20922, p. 4.

[1] JCI originally intervened in this docket jointly and severally with Pacific Machinery, Inc. ("PMI"). In the last few days, a sale of PMI to Hawthorne Machinery Co. ("Hawthorne") has been completed. Hawthorne is re-evaluating PMI's participation in this docket. Undersigned counsel continues to represent JCI with respect to the matters in this docket, but no longer represents PMI.

I. INTRODUCTION

This proceeding was instituted by the Commission in Order No. 20582, dated October 21, 2003, as an investigation to examine the potential benefits and impacts of distributed generation on Hawaii's electric distribution systems and market. As a publicly-held business generally engaged in the provision of heating, cooling, energy conservation, and related services and equipment, JCI plans, designs, installs, and maintains distributed generation systems, including combined heat and power ("CHP") systems. The outcome of this Commission proceeding will have a direct and substantial impact on the development of distributed generation in the state of Hawaii in general, and on the ability of JCI to effectively compete for potential customers for its distributed generation products in particular.

The issues surrounding distributed generation affect a variety of interests, including those of the citizens of the State of Hawaii, the ratepayers that purchase regulated utility service (hereinafter sometimes referred to as the "ratepayers"), the regulated electric utility companies ("regulated electric utilities"), and third-party suppliers of distributed generation equipment and services, such as JCI. Distributed generation provides commercial and industrial electric customers with a realistic opportunity to manage their own electric requirements, reducing both their total energy costs as well as their dependence on utility-owned generation and fossil fuels. At the same time, distributed generation may provide secondary benefits to parties not directly involved in the transaction. For example, distributed generation may reduce and/or delay the need for additional central generating facilities, alleviate some of the strain on the current electric distribution system, and reduce the use of fossil fuels, thereby benefiting both the State and the users of the utilities' regulated services.

The benefits of distributed generation are not illusory; they can be realized now. As the Commission correctly recognized, "[i]t is anticipated that the use of distributed generation and DER ["distributed energy resources"] will grow substantially in the coming years throughout the nation including Hawaii." Order No. 20582, p. 1. JCI is ready, willing, and able to enter this market and to compete for the business of those consumers interested in distributed generation, but can only do so if all entities – including regulated electric utilities – are placed on equal footing in soliciting such business.

JCI's overall goal in this proceeding is to ensure that a competitive market for distributed generation is encouraged and developed, and that all potential competitors in that market are placed on a level playing field with respect to all aspects of that market, including, but not limited to, access to customer and electric system information, their ability to interconnect with the existing electric system, and their ability to compete with one another.

As this is a preliminary statement of position, JCI specifically reserves the right to clarify, modify, or change the positions as set forth herein.

II. EXECUTIVE SUMMARY

In this pleading, JCI addresses myriad issues that concern distributed generation, and whether and how regulated electric utilities should be permitted to participate in the emerging distributed generation market. However, JCI's basic positions can be summarized as follows:

- Distributed generation provides positive benefits to the entity that installs such facilities, and may also provide positive secondary benefits to the State of Hawaii and its citizens in the form of reduced strain on distribution facilities, a reduction and/or delay in the need for additional centralized generation facilities, and a reduction in the use of fossil fuels.

- Any policies, rules, and regulations that are developed with respect to the participation of regulated electric utilities in any distributed generation activities should be designed so as to encourage the development of a vibrant and competitive market for distributed generation services and equipment in Hawaii.

- Any benefits to be realized from distributed generation are best achieved and maximized by encouraging the development of a truly competitive market, and by having such services provided by entities that have been placed on equal footing in that market.

- Regulated electric utilities should be prohibited from offering distributed generation services as regulated or quasi-regulated services.

- Regulated electric utilities should be allowed to participate in the distributed generation market only through a separate, independent, unregulated affiliate.

- All entities that compete with each other to provide distributed generation services – including any affiliate of a regulated electric utility -- should have equal and simultaneous access to information and data concerning potential distributed generation service customers and the electric system.

- Reasonable standards concerning interconnections between distributed generation projects and the existing electric system should be developed in this docket and applied consistently to all entities engaged in such projects. Thus, existing interconnection standards should be revisited to ensure that they are consistent with the goal of encouraging the development of a competitive market for distributed generation.

- So-called standby charges should be prohibited or eliminated, or, in the alternative, such charges should be established at reasonable levels that do not discourage a potential customer from electing to proceed with a distributed generation project.

Specific positions concerning a variety of issues are set forth in the remainder of this pleading.

III. GENERAL STATEMENT OF POSITION

Electric utility companies are currently the dominant owners of electric generation in Hawaii. However, states are moving towards requiring divestiture of utility-owned generation and taking other measures to encourage competition in generation services. In JCI's view, continuing the concentration of electric generation in the hands of the electric utilities is not the best course of action for the State, its citizens (whether individuals or businesses), or the ratepayers. JCI submits that distributed generation projects offer real benefits to the parties directly involved in the projects, and hold the promise of providing secondary benefits to the State, its citizens, and the ratepayers.

As to the former, distributed generation projects -- such as the installation of combined heat and power facilities -- provide primary benefits to the contracting party. That party should experience an overall reduction in its total electric costs for a facility, and may be able to further reduce its overall energy costs by utilizing the heat energy created as a by-product of generating energy. As to the latter, there are secondary benefits that may flow to third parties not directly involved in the project as a result of the installation of distributed generation facilities, such as a reduction or delay in the need for new centrally-located generation facilities, a reduction in the strain on overburdened distribution systems, and a reduction in the use of fossil fuels.

Thus, one major purpose of this docket should be to ensure that any benefits to be achieved from distributed generation are maximized. JCI submits that these benefits can best be maximized by encouraging the development of a truly competitive market for distributed generation. For example, there should be no artificial barriers to entry into this market that would discourage or prohibit entities that wish to compete to provide distributed services and equipment from entering the market. Thus, information concerning the electric consumption, usage patterns, and other pertinent information of customers interested in installing distributed generation systems should be readily

available to all potential competitors simultaneously. Similarly, while standards for interconnections with the existing electric system should be developed, those standards should be reasonable and applicable to all potential competitors without exception. Moreover, standby rates should either be eliminated or be properly designed so as to encourage, not discourage, potential distributed generation customers from participating in distributed generation programs.

To further the goal of developing a truly competitive market for distributed generation services and equipment, it is necessary to determine at the outset whether it is possible for regulated electric utilities to fairly compete with unregulated entities to provide such services and equipment. JCI submits that if the regulated electric utilities, which are the dominant owners of generation in Hawaii at this time, also desire to provide distributed energy services as part of their regulated services in competition with unregulated, third-party suppliers like JCI, there are many serious and difficult issues that will have to be decided in this docket. As further discussed below, it is for this reason that JCI concludes that regulated electric utilities should not be permitted to enter the distributed generation market by offering such services and equipment as regulated or quasi-regulated tariff services. Rather, they should be permitted to participate in this market only through a separate, unregulated affiliate that is subject to all of the policies, rules, and regulations that are applicable to other, unregulated entities.

This conclusion is based on sound reasoning. Obviously, as a result of their regulated activities, regulated electric utilities currently have a "leg up" on third-party distributed generation suppliers because they have immediate access to useful information concerning existing customers that are likely to install and/or use distributed generation services, as well as immediate and detailed access concerning the status of the electric system and plans for its future. For example, they are likely to possess years of detailed usage information, information concerning the status of the

distribution facilities used to serve such a customer, and information concerning the past, current, and future status of the system. As to the latter, these utilities know -- or should know -- where the bottlenecks exist, where facilities are in need of repair or replacement, and where the greatest amount of growth is likely to take place.

Access to such information places regulated electric utilities in a superior position with respect to solicitation of distributed generation customers and projects. Moreover, it raises the specter that the regulated electric utilities could use this information to their competitive advantage by either refusing to share such information with all competitors, or by failing to share such information in a timely fashion.

There is another important issue that is raised if regulated electric utilities are permitted to offer distributed generation services and equipment as regulated or quasi-regulated services: the thorny issue of cross subsidization. Stated simply, the issue is this: should regulated electric utilities be permitted to use regulated rates for traditional utility service to subsidize their distributed generation ventures? JCI submits that they should not be permitted to do so; if regulated electric utilities are permitted to use ratepayer funds to subsidize distributed generation projects, unregulated entities will be unable to compete, and will drop out of the market.

Given their dominant market position with respect to ownership of electric generation and provision of electric service, the potential for anticompetitive behavior, and the potential for cross-subsidization of distributed generation activities through the rates paid by users of regulated services, permitting the regulated electric utilities to offer distributed generation services as regulated or quasi-regulated services would lead to far more problems than it would solve. Thus, JCI's conclusion is that regulated electric utilities should not be permitted to offer distributed generation services and equipment as regulated or quasi-regulated services.

Instead, JCI submits that regulated electric utilities should be permitted to participate in this market only through a stand-alone, unregulated affiliate that must play by exactly the same rules as other unregulated entities. While not a perfect answer, use of a separate affiliate would at least reduce the risk that the regulated electric utilities could use information gained through their regulated operations or their stature as the dominant owners of electric generation to gain an unfair competitive advantage in the distributed generation market, and would reduce the risks associated with cross subsidization of distributed generation projects by ratepayers. Likewise, use of a separate affiliate would permit the Commission, the Division of Consumer Advocacy, and others, to ensure that rates for regulated services are not being used to subsidize unregulated activities.

Use of a separate affiliate would also avoid or reduce the need to consider here a host of difficult issues that would have to be addressed if regulated electric utilities were permitted to offer distributed generation services as part of their regulated services. For example, if regulated electric utilities are prohibited from competing directly in the emerging market for distributed generation, issues concerning whether regulated electric utilities are unfairly marketing such services to their existing customers should be minimized.

Likewise, issues concerning whether electric utilities are unfairly using their status as a regulated utility to influence a customer's decisions with respect to the installation and servicing of distributed generation equipment, to enter into exclusive agreements to supply such equipment (which would simply freeze other third-party competitors out of the market), or to disparage, disrupt, discourage, or otherwise thwart the efforts of third parties to compete for distributed generation projects, should also be minimized. Moreover, if regulated electric utilities are not in the distributed generation business, they have a greater incentive to establish interconnection, standby, and other

such policies and charges fairly, because such policies and charges would apply equally to their affiliates.

In short, issues concerning abuse of market power, undue preference, unlawful cross-subsidization of distributed generation services, and unreasonable discounts can be somewhat minimized by prohibiting regulated electric utilities from offering distributed generation services and equipment as regulated or quasi-regulated services. Instead, the utilities would be placed in the role of "honest broker" to facilitate the development of all distributed generation projects by developing, in conjunction with the Commission and the Parties and Participants in this proceeding, reasonable policies concerning access to information, interconnections, and standby charges (assuming that such charges are necessary at all).

The promise of distributed generation can best be fulfilled by policies that ensure the development of a truly competitive market for such services and equipment. JCI's position here is that the development of such a market depends on ensuring that all entities that wish to compete are placed on a level playing field with respect to access to information, interconnection policies, standby charges, and other critical issues. The outcome of this docket can go a long way towards ensuring that a competitive market develops, and that no unfair competitive advantage is bestowed upon regulated electric utilities.

IV. STATEMENT OF POSITION AND COMMENTS CONCERNING WHY THE ISSUES LISTED IN ORDER NO. 20922 ARE PERTINENT AND SHOULD BE ADDRESSED IN THIS DOCKET

As noted above, in Order No. 20922, the Commission directed the parties and the participants to briefly explain why the issues listed in that order are pertinent to, and should be addressed by, the Commission in this proceeding. Order No. 20922, p. 4. JCI will address each of the issues listed in the Order in turn.

In addition, in Order No. 20922, the Commission stated as follows:

- The Parties and Participants may also address general issues regarding distributed generation raised in the informal complaint filed by Pacific Machinery, Inc., Johnson Controls, Inc., and Noresco, Inc., against HECO, MECO and HELCO on July 2, 2003 (Informal Complaint No. IC-03-098), but not specific claims made against any of the Parties named in the complaint.

The "Informal Complaint" raised a host of detailed issues, which amplify, augment, and supplement the issues set forth in the Commission's order. These issues can be categorized in the same fashion as the Commission has categorized the other issues, that is, as planning, impact, or implementation issues.

For purposes of this preliminary statement of position, JCI will first address each issue listed in three categories established by the Commission's Order, and will then address the issues in the Informal Complaint within those same categories. Mindful of the Commission's directive not to raise specific claims against any of the Parties named in the Informal Complaint, JCI has modified the issues contained in the Informal Complaint so as to state them in a generic fashion.

1. Planning Issues.

a. Planning Issues Listed In Order No. 20922.

In its Order, the Commission listed the following issues as planning issues:

- What forms of distributed generation (e.g., renewable energy facilities, hybrid renewable energy systems, generation, cogeneration) are feasible and viable for Hawaii?
- Who should own and operate distributed generation projects?
- What is the role of the regulated electric utility companies and the Commission in the deployment of distributed generation in Hawaii?

The planning issues are obviously at the core of the issues to be addressed and decided by the Commission in this docket. If distributed generation is to be developed in a coherent and orderly fashion, so as to bring about the greatest benefits to all parties, it is critical to address first the types of distributed generation and the extent of the role of the regulated electric utilities.

JCI submits that these issues are among the most important in the proceedings, and would include a discussion of the following subissues:

- Should distributed generation services and equipment be offered as a regulated or quasi-regulated service?
- Should ratepayers that purchase regulated utility service be required to subsidize distributed generation?
- Are distributed generation equipment and services best provided only by unregulated suppliers (including fully-separated utility affiliates) in a competitive market?
- Will distributed generation result in net benefits to regulated utilities and their ratepayers?

In the general statement of position above, JCI has already stated its position with respect to some of these issues. For example, JCI submits that, in order for a vibrant, competitive market to evolve with respect to distributed generation services, those services should be provided by entities that compete on an equal footing. This conclusion means that distributed generation services and equipment could ***not*** be offered by regulated electric utilities as a regulated or quasi-regulated service. Instead, regulated electric utilities should be permitted to enter this market only through non-regulated affiliates that are on equal footing with other unregulated entities.

One thing is certain. Ratepayers that purchase regulated utility service should ***not*** be required to subsidize distributed generation through their rates. The market for distributed generation should stand or fall on it own. Potential customers should purchase distributed generation services when it makes economic sense for them to do so. The secondary benefits to the State, its citizens, and the ratepayers that may be achieved will be maximized by allowing competitive market forces to work.

While the Commission has identified a number of different forms of distributed generation (including renewable energy facilities, hybrid renewable energy systems, generation and cogeneration), JCI submits that the most promising of the current technologies are combined heat and power systems. This is technology that is available now, and, as discussed above, that provides real benefits to the purchaser of CHP, and that has the potential to provide secondary benefits to the State, its citizens, and the ratepayers as well. Ownership of such facilities should be a matter of private contract between the seller and the buyer of such facilities, subject to reasonable rules and regulations concerning interconnection requirements.

Finally, as to who should own the distributed generation facilities, consistent with JCI's position that regulated electric utilities should not be permitted to provide distributed generation services and equipment as regulated or quasi-regulated services, such facilities should not be owned

by the regulated electric utilities. Normal contract principles should be applied to determine whether such facilities would be owned by the seller of the equipment or the customer, or would be leased to the customer.

b. Planning Issues Listed In The Informal Complaint.

As discussed herein, the majority of the issues raised in the Informal Complaint can be categorized as impact or implementation issues. However, there is at least one issue from the Informal Complaint that relates to the planning issues:

- Should the Commission promulgate rules that would prevent regulated electric utilities from taking advantage of their regulated utility status when they enter the distributed generation business?

This issue is part and parcel of the issues concerning whether and how regulated electric utilities should be permitted to participate in the market for distributed generation. JCI's position is that regulated electric utilities should not be permitted to offer distributed generation services as regulated or quasi-regulated services. However, if that recommendation is rejected, it would become necessary to address this issue so as to prevent the utilities from using their position to discourage potential customers from shopping for services from non-utility entities.

2. Impact Issues.

a. Impact Issues Listed In Order No. 20922.

Order No. 20922 designates the following issues as impact issues:

- What impacts, if any, will distributed generation have on Hawaii's electric transmission and distribution systems and market?
- What are the impacts of distributed generation on power quality and reliability?
- What utility costs can be avoided by distributed generation?

- What are the externalities costs and benefits of distributed generation?
- What is the potential for distributed generation to reduce the use of fossil fuels?

The impact issues go hand in glove with the planning issues, and JCI thus submits that they should be addressed by the Commission in this docket. As discussed above, it is JCI's position that the use of distributed generation may, in the future, help to reduce the strain on portions of the distribution system, reduce or delay the need for construction of centralized generation, and reduce the use of fossil fuels to generate electricity.

For example, if a CHP system is installed for a customer on a portion of the electric distribution system that is operating at or near maximum capacity, the use of that system will reduce the strain on that portion of the distribution system without the need for the utility -- and, thus, the ratepayers -- to expend resources to upgrade that portion of the system. Similarly, if distributed generation becomes widely used, the need for additional centralized generation to serve the needs of customers of regulated electric service should be reduced because existing centralized generation previously used to serve the distributed generation customer will now be available to serve the increased or new requirements of other electricity users. While these benefits may be small at first, they are, nevertheless, positive benefits that should increase as the implementation of distributed generation increases. Use of distributed generation may also have positive impacts on power quality and reliability. Likewise, distributed generation may permit the utility to reduce or avoid certain costs, such as the costs associated with planning for and installing upgrades to certain portions of its distribution system, and, perhaps, planning for and constructing additional centralized generation facilities.

The benefits of distributed generation to the direct consumer of such services should be a reduction in their overall electricity costs. Likewise, there should be a reduction in either that customer's use of fossil fuels to fire its own generation, or a reduction in the regulated electric utilities' use of fossil fuels to fire the generation necessary to serve the needs of the customer that is now using distributed generation to serve a part of those needs.

Again, in order for distributed generation to be implemented in Hawaii in a coherent and organized fashion, these issues should be addressed now.

b. Impact Issues Listed In The Informal Complaint.

The following issues were raised in the Informal Complaint and also concern the impact that distributed generation may have on Hawaii, its citizens, market participants, regulated electric utilities, and ratepayers.

(1) Issues That Would Arise If Regulated Electric Utilities Are Permitted To Offer Distributed Generation Services And Equipment As Regulated Or Quasi-Regulated Services.

As discussed above, JCI's position is that any benefits to be achieved from the development of distributed generation can best be achieved by prohibiting regulated electric utilities from directly participating in the distributed generation market by offering such services and equipment as regulated or quasi-regulated services. A number of the issues raised in the Informal Complaint address how the development of a competitive distributed generation market in Hawaii would be hindered if regulated electric utilities are permitted to offer such services as regulated or quasi-regulated services. As discussed in the general comments set forth above, permitting the utilities to offer such services as part of their regulated services would introduce a large number of difficult

issues into this docket, issues that would have to be resolved prior to permitting the utilities to offer such services. These include the following:

- Should regulated electric utilities be required to file applications with, and to have approval from, the PUC prior to installing, operating, and maintaining distributed generation equipment at a customer site? Should these documents and proceedings with respect to them be available to the public?

- Should regulated utilities be permitted provide distributed generation services and facilities at no cost to a prospective customer? Would the installation of customer-site distributed generation at no cost to such customers constitute an undue preference?

- Should regulated electric utilities be permitted to include in their regulated utility rate base the costs of distributed generation equipment and its maintenance? Are the secondary benefits to ratepayers – such as reduction of strain on portions of the electric systems of regulated electric utilities and reduction in the use of fossil fuels -- sufficient to justify inclusion in the utility's rate base of the full cost of distributed generation equipment, such as CHP equipment, and its maintenance? Should regulated electric utilities be required to determine whether a new or existing customer or other entity would be willing to absorb the cost of part or all of the customer-site generation before utilizing ratepayer funds for these purposes?

- What are the standards under which the installation of customer-site distributed generation, such as CHP, by regulated electric utilities should be evaluated?

- If a potential distributed generation customer already has electrical service, should regulated electric utilities be permitted to install redundant electrical generating equipment at ratepayer expense?

- Would the installation of distributed generation facilities by regulated electric utilities at ratepayer expense be at odds with policies that limit the amount that regulated electric utilities can spend to add a new customer, and that require that potential customer to pay for the remainder of the distribution facilities necessary to provide service?

- Is any benefit to the system, no matter how small (*e.g.*, a .00001% reduction in system line losses), enough to justify a decision to expend ratepayer funds on customer-site distributed generation?

- In determining whether regulated electric utilities should install distributed generation, should the life cycle costs of the distributed generation facilities be compared to the costs of a distribution upgrade?

- In conjunction with any distributed generation projects offered as regulated or quasi-regulated services, should regulated electric utilities be permitted to enter into exclusive supplier agreements with one or a few entities to supply the equipment, such as CHP units, for such projects? If so, is it in the public interest to encourage competitive bidding to supply such equipment for each such project undertaken by a regulated electric utility? What standards should be developed to decide how to award bids in such cases and what entity will determine the winning bid? What procedures will be established to review the bidding process and to deal with any complaints concerning that process or the award of the bid? Should regulated electric utilities be permitted to use "exclusive supplier" agreements so as to avoid any requirements necessitating PUC approval before commitment of funds for utility capital projects?

- Assuming *arguendo* that exclusive supplier arrangements are approved for a regulated electric utility with respect to the equipment used in distributed generation projects, what should be the duration of any such arrangements? Should that arrangement be reviewed by the Commission prior to execution and found to be in the public interest? Should it be made available for public review? What guidelines should be established so that third-party distributed generation equipment suppliers can compete on a level playing field with a supplier in an exclusive relationship with a regulated electric utility for a potential customer's business?

It is clear that an initial determination as to the role regulated electric utilities will be permitted to play in the emerging market for distributed generation will impact whether, and, if so, how, third-party suppliers will view that market. If regulated electric utilities are permitted to use their dominant market position to compete unfairly, the result will be that third-party suppliers will abandon the Hawaiian market, and there will be no competition for these services.

With respect to the above-listed issues from the Informal Complaint, it is JCI's preliminary statement of position that regulated electric utilities should ***not*** be permitted to:

- install distributed generation equipment or to provide distributed generation services at no cost to a potential customer, or to include such costs in the rates for regulated services;
- justify a "no cost" option for distributed generation projects by referring to the benefits that will result from the installation of any distributed generation facilities, whether installed by regulated electric utilities or unregulated entities at cost or at no cost;
- install redundant equipment for customers that already have electrical service at ratepayer expense;
- ignore existing tariff provisions concerning pre-approval of capital expenditures; or
- enter into exclusive supplier agreements with one or a few entities to supply equipment for distributed generation projects undertaken by the utilities.

As discussed elsewhere, these issues can be avoided by prohibiting the regulated electric utilities from offering distributed generation services and equipment as regulated or quasi-regulated services. JCI reiterates that this is the appropriate resolution of these issues.

(2) Limitations On Services That Regulated Electric Utilities Could Provide In Conjunction With Distributed Generation Projects.

Another set of issues raised in the Informal Complaint that should be decided in this docket is the extent to which regulated electric utilities would be permitted to engage in activities that are arguably related to distributed generation projects. Stated differently, distributed generation projects, such as combined heat and power projects, are often installed in conjunction with the installation of, upgrades to, or modification of, existing cooling and heating systems. Depending upon how expansive a regulated electric utility decides to read any authorization to engage in distributed

generation projects, this issue could open up an entirely new and extremely difficult set of issues concerning the lines of business in which the utility could compete.

The following issues were raised in the Informal Complaint:

- Should regulated electric utilities be allowed to engage in heating, ventilation, and air conditioning business activities in conjunction with distributed generation projects? If so, how should these activities be regulated by the PUC?

- What benefit to the system or to the customers of regulated electric utility services would result from ownership of individual site waste heat recovery systems, chillers, water heating equipment, etc., by regulated electric utilities?

- Assuming *arguendo* that regulated electric utilities are permitted to engage in heating, ventilation, and air conditioning business activities, how would the utilities account for these types of expenditures and any profits in rates?

While simply stated, these issues again go to the core issue raised in this docket: the extent to which regulated electric utilities should be permitted to participate in the distributed generation market. Traditionally, such utilities have been authorized to provide their customers with electric supply service, distributed to that customer through the utility's electric system. If the utility wished to participate in some other endeavor, such as the sales of appliances or insurance, that was accomplished through a separate affiliate, or there were strict rules applied to the separation of those services from the utility's core business.

The same should be true of heating, ventilation, and air conditioning services; that is, to the extent that the utility is permitted to engage in these types of services at all, it must do so through a separate affiliate. Otherwise, any business venture that failed could have a severely detrimental impact on the ratepayers. For these reasons, it is JCI's position that regulated electric utilities should

not be permitted to engage directly in selling services that are arguably related to distributed generation, just as they should not be permitted to engage directly in selling distributed generation.

3. Implementation Issues.

a. Implementation Issues Listed In Order No. 20922.

Order No. 20922 sets forth the following issues as implementation issues:

- What must be considered to allow a distributed generating facility to interconnect with the electric utility's grid?
- What are the appropriate rate design and cost allocation issues that must be considered in the deployment of distributed generation facilities?
- What revisions should be made to the integrated planning process?
- What forms of distributed generation (e.g., renewable energy facilities, hybrid renewable energy systems, generation, cogeneration) are feasible and viable for Hawaii?

  Note: JCI has previously addressed this issue in the section of this pleading addressing "Planning Issues."
- What revisions should be made to state administrative rules and utility rules and practices to facilitate the successful deployment of distributed generation?

JCI has the following comments with respect to these issues. First, as to interconnections between a distributed generating facility and the electric utility grid, this is an issue that must be addressed now in order to facilitate the smooth and timely development of distributed generation in Hawaii. As noted above, JCI believes that standards for such interconnections should be applicable to all entities without exception (including the regulated electric utilities or their affiliates), should be reasonable, should be easily understood, and should not be used to unduly delay any distributed generation project. Clearly stated standards that have been developed with the input of the

Commission and all Parties and Participants can only help to encourage the development of distributed generation within the State. JCI understands that certain interconnection standards already exist, but submits that these standards should be revisited as part of these proceedings to determine whether any modifications to them are required in order to encourage the development of a competitive market for distributed generation.

Similarly, JCI submits that certain important rate design and cost allocation issues must be decided now. As discussed above, JCI's position is that one of the major issues to be resolved in this proceeding is whether the utilities should be permitted to offer distributed generation services, and, if so, how they should be permitted to offer such services. JCI's basic position is that any distributed generation services would be provided through a separate, unregulated affiliate rather than through the utility itself. The reason is twofold: first, to ensure that regulated electric utilities do not have an unfair advantage in competing for customers, and second, to ensure that the utilities' distributed generation projects are not subsidized by customers of regulated electric utility service.

Thus, cost allocation issues are of paramount importance, such as what costs would be attributed to the affiliate that is providing distributed generation services. JCI understands that the Commission would not be regulating a separate affiliate, but the Commission should able to determine whether a regulated electric utility has properly adjusted its expenses and rate base for the formation of an affiliate. Rate design issues are also important, particularly with respect to standby charges and discounts, which are discussed in depth below.

As to the issue of what revisions should be made to state administrative rules and utility rules and practices to facilitate the successful deployment of distributed generation, JCI submits that one likely outcome of these proceedings will be a set of recommended changes to both the state administrative rules and utility rules and practices to implement the deployment of distributed

generation. At present, JCI intends to include in their presentation an analysis of this issue, and recommended revisions.

The same conclusion can be made with respect to any changes to the integrated resource planning process; such changes may indeed be required as a result of these proceedings. In fact, such issues were addressed in the Informal Complaint:

- Should regulated electric utilities be required to comply with the Integrated Resource Plans (IRPs) approved by the PUC in promoting utility-owned distributed generation facilities?

- Would it be consistent with the IRP Framework for the PUC to grant regulated electric utilities lost margins and shareholder incentives for the "negawatts" resulting from utility-owned, customer-site distributed generation facilities?

- Should regulated electric utilities be permitted to install customer-site distributed generation facilities as a demand-side management (DSM) measure? If so, should PUC authorization been required?

Again, these issues can be minimized by requiring regulated electric utilities to compete in the distributed generation market only through a separate affiliate.

b. Implementation Issues Listed In The Informal Complaint.

(1) Discounts, Rebates, Incentives, And Similar Issues.

Another factor that will greatly influence the degree to which a competitive market for distributed generation develops in the State of Hawaii concerns the so-called "discount" issue. That is, what discounts from regulated rates for other electric service or incentives should a utility be permitted to provide to a potential distribution customer, if any. The Informal Complaint included the following issues with respect to this topic:

- Would it be discriminatory and anticompetitive to permit regulated electric utilities to offer discounts, rebates, or other incentives in association with distributed generation projects?

- Are such discounts, rebates, or other incentives consistent with the existing tariff structure, or has that structure become inappropriate if regulated electric utilities enter this new line of business?

- Should documents concerning discounts and rebates be made available to the public?

Obviously, a third-party distributed generation supplier cannot offer a discount to a utility's regulated rates; hence, it is JCI's position that such discounts should not be permitted. Stated differently, regulated electric utilities should not be permitted to "sweeten" a distributed generation deal by offering a discount or rebate on other regulated services provided by the utility.

Again, such issues should be decided now, because they will greatly impact the development of a competitive market for distributed generation. If utilities are permitted not only to subsidize the cost of distributed generation through regulated rates, but to provide discounts, rebates, incentives, or similar payments and to have those payments subsidized by ratepayers as well, third-party suppliers of distributed generation services and equipment simply will not be able to compete, and a competitive market for distributed generation will not develop.

There is also an issue concerning so-called "customer retention" discounts, which could, for example, be paid when a customer agrees not to install distributed generation. The question is whether such discounts are necessary, and, indeed, if they are at cross purposes with the objectives of distributed generation. These issues were addressed in the Informal Complaint:

- Should the Commission allow regulated electric utilities to offer a "customer retention" discount when the "threat" of losing the customer is (1) created by the utility itself through the offering of distributed generation services, and (2) the customer would in no way be "lost" to the utility, since the utility will be providing both the cogeneration and the supplemental power?

- Should the Commission allow regulated electric utilities to offer these discounts even if the customer is building a brand new facility and therefore is not being retained by the utility, but being served for the first time? If so, why?

- Are customer retention discounts being subsidized by other ratepayers?

Such discounts and pricing policies are clearly at odds with the objective of developing a truly competitive market for distributed generation, JCI submits such discounts should not be permitted.

(2) Standby Charges.

The Commission has designated as one of the issues to be considered in this proceeding the appropriate rate design and cost allocation to be associated with the deployment of any distributed generation facilities. There are several primary subissues that should be resolved now if a truly competitive market is to develop. One of the most important of these concerns standby charges; that is, a charge that a regulated electric utility may be permitted to levy in order to stand by to provide service in the event that the distributed generation equipment fails.

The Informal Complaint identified a number of specific issues concerning standby charges:

- Should the Commission repeal or prohibit standby charges, so that regulated electric utilities, customers and third-party suppliers would be on a more level playing field?

- Should regulated electric utilities be permitted to charge a standby charge that is higher than the otherwise applicable rate for purchasing electricity by customers considering distributed generation?

- Should regulated electric utilities be required to charge themselves or their affiliates the same standby charge with respect to regulated utility owned, operated, and maintained distributed generation facilities?

Standby charges are the source of a great deal of controversy. As noted above, there is an initial issue of whether such charges are necessary at all. If that question is answered in the negative, then there are no further issues to address. However, if that question is answered in the affirmative, then there are the difficult issues of establishing the charge and whether customers should be *required* to have standby service if they do not desire it.

JCI submits that such charges should be optional rather than mandatory. A customer that has installed distributed generation and that has its own backup generation may not desire or require such service. Further, any optional standby charge should not be priced so high as to obliterate any potential economic benefits from distributed generation. Other issues to consider include the level of standby service a customer desires and a whether an interruptible or semi-firm standby service should be offered.

(3) Other Ratemaking Issues.

In addition to the obvious issues concerning allocation of costs, prevention of cross subsidies, and separation of the expenses and revenues associated with distributed generation projects from regulated electric utility service, there are additional ratemaking issues that would require resolution here if regulated electric utilities are permitted to offer distributed generation services and equipment as regulated or quasi-regulated services. Many of these were identified in the Informal Complaint:

- How will the costs and quantities of fuel purchased for utility-owned, customer-site distributed generation facilities be handled in the energy rate adjustment clause applicable to all customers?

- Will customer-site distributed generation be exempt from utility economic dispatch rules, and if so, why?

- Should regulated electric utilities be permitted to sell to their distributed generation customers diesel, propane, naphtha, or other fossil fuels necessary to satisfy any heating or other needs that will be not be met by the waste heat recovery from distributed generation facilities? If so, (a) what customers are eligible to purchase such fuels, under what conditions, and at what prices; (b) should regulated electric utilities have a published tariff for this service; and (c) should regulated electric utilities be required to credit their other customers with other revenues equivalent to the fair market price of the fossil fuels so sold?

- Should energy purchase contracts entered into by regulated electric utilities be filed with, and approved by, the Commission, and should these documents be made available to the public? Assuming such contracts are appropriate, what term is appropriate?

- Should the Commission investigate the tiered demand and energy charges of regulated electric utilities and how these charges are affected by distributed regulation to determine whether the tiered pricing structure, in combination with regulated utility-owned distributed generation, creates an unfair competitive advantage for such utilities engaging in distributed generation?

- Should regulated electric utilities be permitted to use utility property for the location of distributed generation facilities used to serve specific customers? If so, how should regulated electric utilities compensate their customers for this use?

JCI submits that these issues could be avoided or minimized by prohibiting regulated electric utilities from directly participating in the distributed generation market by offering such services as regulated or quasi-regulated services.

(4) Access To Data.

Another major issue which must be addressed if regulated electric utilities are permitted to engage in distributed generation projects is whether those utilities will be able to utilize and rely upon data that is not generally available to all competitors and whether they should be required to make such data available to all competitors. Stated differently, prior to bidding on any potential project, all parties – regulated electric utilities and third-party competitors alike – should have

simultaneous access to the same information with respect to both the individual project and its effect on the electric system.

Specific issues concerning this topic were raised in the Informal Complaint:

- Should regulated electric utilities be required to identify publicly the amounts and areas on their systems where distributed generation is needed, and then provide all suppliers with an equal opportunity to bid for the projects?

- Should rules and regulations be adopted to require that regulated electric utilities make known information about their needs for new generation to both non-utility affiliates and unrelated businesses at the same time and to the same extent?

Again, this issue is more easily resolved if regulated electric utilities are not permitted to participate directly in the competitive distributed generation market. In that case, rules and regulations could and should be established by the Commission that would govern the release of information to all potential competitors (including affiliates), instead of establishing rules and regulations that try to level the playing field between a regulated electric utility and any third party suppliers that are in competition for the same project. Again, resolution of these issues is critical to the development of a truly competitive market and they should be resolved here and now, before any regulated electric utility is authorized to bid on a distributed generation project in competition with an unregulated third party.

Moreover, unlike some of the other issues discussed, this issue will have to be addressed in some fashion even if regulated electric utilities are required to establish separately-stated affiliates to engage in distributed generation projects. This issue was identified in the Informal Complaint:

- Should regulated electric utility affiliates have special access to regulated utility resources, customer load and regulated utility system information, or should such information be made available simultaneously to all entities?

Hopefully, the answer is obvious: affiliates should not have any better access to information than any other party competing for a particular project.

(5) Sole Supplier Clauses.

Yet another issue is raised if regulated electric utilities offer distributed generation services as regulated or quasi-regulated services: should utilities be permitted to require their distributed generation customers to take all of their electric service from the utilities? This issue, too, was identified in the Informal Complaint:

- Should the PUC permit a regulated electric utility to include a "sole supplier" clause that requires a customer to take all of its electricity from that utility as a condition for using that utility's services to build and own customer-site distributed generation projects?

JCI submits that such clauses should be prohibited outright as anti-competitive and unnecessary.

(6) Need For Pilot Projects.

Again, assuming *arguendo* that regulated electric utilities are permitted to provide distributed generation services as part of their regulated tariff services, it will be necessary to determine whether pilot projects should be conducted and, if so, how they should be structured. JCI submits that by prohibiting the regulated electric utilities from participating directly in the distributed generation market, the need for any pilot projects would be eliminated. If a competitive market for distributed generation services and equipment emerges as a result of the Commission's action here, distributed generation projects would be undertaken if and when a particular customer chooses to embark on such projects for economic, environmental, quality of service and other reasons.

As discussed in the Informal Complaint, if regulated electric utilities are permitted to participate in the distributed generation market, and pilot projects are to be utilized, there are again a host of issues that must be resolved prior to implementation of such projects so as to protect third-party suppliers from the abuse of market power. These include the following:

- Are special pilot projects necessary? Do pilot projects provide regulated electric utilities with an opportunity to gain knowledge concerning the technology or possible applications of CHP at ratepayer expense? Should any regulated electric utility conducting a pilot project be required to share any information gained from any such project with all entities providing distributed generation services and equipment?

- Prior to permitting a regulated electric utility to engage in a pilot project, should that utility be required to file an application with the Commission that would be subject to Commission review, comments by other parties, hearings, etc.?

- Should the PUC handle oversight of "pilot" projects differently from approvals for other projects? For example, should the PUC grant non-specific pilot project approvals, so that regulated electric utilities can offer a large group of potential customers the opportunity to participate in a pre-approved "pilot" project?

JCI submits that pilot projects are unnecessary because distributed generation is a proven technology that can be implemented now. However, if such projects are implemented, they should be designed so as to achieve specific goals. Moreover, any information gleaned from such projects should be available to any entity that is interested in distributed generation.

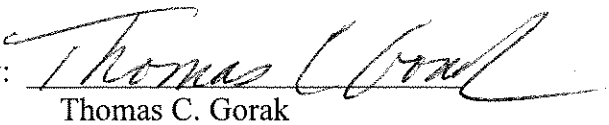
V. CONCLUSION

This docket is of paramount importance to the development of a truly competitive distributed generation market in the State of Hawaii. The Commission here is presented with a unique opportunity to address these issues at their inception. In so many proceedings, the Commission and the parties are saddled with decisions and agreements that were made long ago and that dictate, to a greater or lesser degree, how issues are to be addressed in the future. Here, the Commission has the somewhat unique luxury of starting with a relatively clean slate.

JCI strongly supports the Commission's decision to address the important issues associated with regulated electric utility participation in the distributed generation market now rather than later. The outcome of this docket will hopefully reflect a commitment to engender a truly competitive market for distributed generation in Hawaii. Regulated electric utilities should be permitted to compete in that market, but only through a separate affiliate that is subject to the same rules and regulations as unregulated third-party suppliers of such services. In this fashion, all potential competitors will be required to compete fairly with each other.

Respectfully submitted,

JOHNSON CONTROLS, INC.

By: 

Thomas C. Gorak
Hawaii Bar No. 0007673

Gorak & Bay, L.L.C.
76-6326 Kaheiau Street
Kailua-Kona, HI 96740-3218
(808) 331-2027

May 7, 2004

CERTIFICATE OF SERVICE

I hereby certify that on this day I have served a copy of the foregoing "Preliminary Statement Of Position And Certificate Of Service Of Johnson Controls, Inc." by depositing same in the United States Mail, first class postage prepaid, and addressed to the following:

Public Utilities Commission 465 South King Street First Floor Honolulu, HI 96813 (hand delivery)	Original plus 8 copies
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Thomas W. Williams, Jr. Esq. Peter Y. Kikuta, Esq. Goodsill, Anderson, Quinn & Stifel Alii Place, Suite 1800 1099 Alakea Street Honolulu, Hawaii 96813	1 copy
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Patsy H. Nanbu Hawaiian Electric Company, Inc. P. O. Box 2750 Honolulu, Hawaii 96840-0001	1 copy
Alan M. Oshima, Esq. Kent D. Morihara, Esq. 841 Bishop Street, Suite 400 Honolulu, Hawaii 96813	2 copies

Alton Miyamoto — 1 copy
President & CEO
Kauai Island Utility Cooperative
4463 Pahe'e Street
Lihue, Hawaii 96766

George T. Aoki, Esq. — 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000

Steven P. Golden — 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000

Gail S. Gilman — 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000

Brian T. Moto — 1 copy
Corporation Counsel
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793

Cindy Y. Young — 1 copy
Deputy Corporation Counsel
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793

Kalvin K. Kobayashi, Energy Coordinator — 1 copy
County of Maui
Department of Management
200 S. High Street
Wailuku, HI 96793

Warren S. Bollmeier II, President — 1 copy
Hawaii Renewable Energy Alliance
46-040 Konane Place, #3816
Kaneohe, Hawaii 96744

John Crouch — 1 copy
Box 38-4276
Waikoloa, HI 96738

Rick Reed — 1 copy
Inter Island Solar Supply
761 Ahua Street
Honolulu, HI 96819

Henry Curtis — 3 copies
Life of the Land
76 North King Street, Suite 203
Honolulu, HI 96817

Sandra –Ann Y. H. Wong, Esq. — 1 copy
1050 Bishop Street, #514
Honolulu, Hawaii 96813

Christopher S. Colman — 1 copy
Deputy General Counsel
Amerada Hess Corporation
One Hess Plaza
Woodbridge, N.J. 07095

Michael de'Marsi — 1 copy
Hess Microgen
4101 Halburton Road
Raleigh, NC 27614

Gordon Bull — 1 copy
Branch Manager
Johnson Controls, Inc.
3526 Breakwater Court
Hayward, CA 94545

Jim Reisch — 1 copy
Pacific Machinery, Inc.
94-025 Farrington Highway
Waipahu, Hawaii 96797

Lani D. H. Nakazawa, Esq. — 2 copies
Office of the County Attorney
County of Kauai
4444 Rice Street, Suite 220
Lihue, HI 96766

Glenn Sato, Energy Coordinator — 1 copy
c/o Office of the County Attorney
County of Kauai
4444 Rice Street, Suite 220
Lihue, HI 96766

John W. K. Chang, Esq. — 1 copy
Deputy Attorney General
Department of the Attorney General
State of Hawaii
425 Queen Street
Honolulu, Hawaii 96813

Maurice H. Kaya, P.E. — 1 copy
Chief Technology Officer
DBEDT-Stategic Industries Division
P. O. Box 2359
Honolulu, HI 96804

Steven Alber — 1 copy
Energy Analyst
DBEDT-Strategic Industries Division
P. O. Box 2359
Honolulu, HI 96804

Dated: Kailua-Kona, Hawaii, May 7, 2003.

Thomas C. Gorak
Hawaii Bar No. 0007673

Gorak & Bay, L.L.C.
76-6326 Kaheiau Street
Kailua-Kona, HI 96740-3218
808-331-2027